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THE GENESEE FARMER.

SATURDAY, MARCH 21, 1835.

The Monthlies.

We have received the various monthly publications devoted to Agriculture and Horticulture, for March.

THE FARMER'S REGISTER—E. Ruffin, Shellbanks, (Va.)—$5,00 a year.

This work, if we may judge from the number before us, which is the only one we have seen for more than a year past, well sustains its high character. Though intended more particularly for the Southern States, it will be found a valuable acquisition to the library of the Farmer in any section of our country. We copy the following introductory paragraph to an article taken from this paper, for the purpose of saying that the "review" alluded to, as well as most of the editorial articles which appear in the Genesee Farmer, are from the pen of our esteemed friend DAVID THOMAS:

"It is altogether unknown to us who is the author of the following concise review—but he is evidently one whose modes of thinking and of investigation are such, that his approbation must be highly prized where bestowed, and his strictures allowed their full and proper weight. It is not only for these reasons that the article is here republished, but because the reviewer has directed his readers' attention particularly to some of the novel positions in the *Essay*, which, if true, certainly are of high importance, and which if unfounded, may be, and ought to be, overthrown."

THE HORTICULTURAL REGISTER—by T. G. Fessenden & J. E. Teschemacher, Boston—$2,00 a year.

The first number of this work was noticed in the Farmer some time since. It is published by Geo. C. Barrett, proprietor of the N. E. Farmer. It is dedicated to the interests of Horticulture, as its title indicates, in all its branches; and the number for the present month is unusually attractive. A writer in alluding to Mr. Mearn's coiling system of cultivating the Grape, a detail of which may be found in our last volume, page 202, relates the following experiment, which will prove interesting to those who wish to accelerate the production of this fruit:

"Some years ago I succeeded in producing fruit at least a year earlier than I could have done by the common methods, by planting a Sweet-water grape in a way which, though not exactly corresponding with that described by Mr Mearns, I consider to have proved successful on the same principle as his, viz: by obtaining a superabundant supply of roots. I selected a shoot more than sixteen feet long, on which I left about three inches on each side of older wood; this I placed in a trench well manured, about twelve feet in length and six inches deep, and then bent the extremity upwards, taking off about a foot from the top and all the buds except two at the upper end; these eyes produced shoots nearly twenty feet long, and, being shortened at the commencement of winter to about half that length, yielded in the following season a good crop of excellent fruit. I should observe that the vine was trained on a gable wall, fronting the south, which it very soon entirely covered. I have no doubt that planting a coiled long shoot in a hole dug in a proper soil would succeed admirably; if the mold should be so light as to render the coiling difficult, three or more thin stakes of perishable dry wood may be inserted in the hole close to its sides, to which the buried coils may be attached by loose bass or other ligatures."

The same writer has the following remarks on the cultivation of Onions:

"The best crop of onions I ever saw was on a stiff clay, which was simply prepared by hoeing and raking off the weeds and spreading some well rotted manure about three inches thick, on which the seed was sown and covered lightly with good earth, provided for the occasion, which was flattened by the spade; the roots not being able to strike downwards spread near the surface, and formed an abundance of large healthy bulbs. I must not omit to state that when the plants were about the thickness of small crow quills, a liberal supply of wood ashes was sifted over them."

The reader is referred to the last page of this paper for an article on the culture of Asparagus, and several other extracts, which we have copied from the Register.

THE CULTIVATOR—By J. Buel, Albany—50 cents a year.

This is No. 1, of vol. 2, and is considerably larger than the previous volume. The liberal extracts which we so often make from this work, sufficiently evince our estimation of it. Though cheap in price it is rich in matter, prepared for the 'improvement of the soil and the mind.' We learn from it, that at the late meeting of the State Agricultural Society, circumstances prevented the delivery of the Address which was expected from L. F. ALLEN, Esq. and that the following officers were chosen for the current year:

JESSE BUEL, of Albany, *President.*

L. F. ALLEN, of Erie,
C. H. HALL, of New-York,
JOHN B. YATES, of Madison,
JOHN B. DUANE, of Schenectady, } *Vice-Presidents.*

JOHN P. BEEKMAN, *Corresponding Sec'y.*

JOHN KEYES PAIGE, *Recording Sec'y.*

CALEB N. BEMENT. *Treasurer.*

Alexander Walsh, Horatio Hickok. John Townsend, *additional members of the Executive Committee.*

THE AMERICAN GARDENER'S MAGAZINE—C. M. & P. B. Hovey, Jr., Boston—$3, a year.

This work is filled, as usual, with a variety of interesting articles on the culture of Fruits and Flowers. The first, is a very interesting notice of several of the most esteemed foreign and native Pears, which have produced fruit in the vicinity of Boston, for which we may hereafter make room in our pages. In the list of native Pears, we observe that the *Seckel*, which is placed at the head, is written *Seckle*. We have forwarded to the editors Nos. 25 and 36, vol. 4, of this paper, containing a correspondence on this subject, which we think will induce them to adopt the orthography of the gentleman whose name this fruit bears, and who uniformly wrote it *Seckel.*

Art. IV. on Planting an Orchard, the reader will find on another page of this paper, and may obtain from it some hints which may lead him to more care both in the selection of his fruit and the planting of his trees.

NEW-YORK FARMER—D. K. Minor, New York—$3,00 a year.

Mr. FLEET, the original proprietor of this work has retired from its editorial chair, and it is now conducted by the publisher, assisted, however, by Mr. F. who has located himself on a farm near the city. The March number is enriched by several communications from the pen of the Rev. HENRY COLMAN, whose writings on Agriculture we always read with pleasure and profit. One of these, is a discussion of the question—"What should the Government of the United States do for Agriculture?" The opinions of Washington are introduced in favor of the establishment of a Board of Agriculture similar to that of Great Britain, and a form of a memorial to Congress on the subject is presented, from which we have only room for the following extracts:

"That the agriculture of the United States, although in an improving, is yet in a very imperfect condition; the resources of the country are very partially unfolded; the cultivation yields by no means those ample returns which it may be made to command; and is far from that improvement and perfection to which it may with the highest advantage be advanced.

That it would contribute essentially and immediately to this object, that a general agricultural survey of the whole country should be undertaken and gradually prosecuted to its completion. That this survey should embrace the actual condition of its agriculture in different parts of the country, going, as far as practicable, from personal observation and intercourse with the most intelligent and successful cultivators, into detailed and statistical accounts of the crops cultivated, the modes of cultivation, the average yield, the value and application of labor, the disposal of the produce, the implements of husbandry, the condition and capabilities of the soil, the improvements of which the agriculture of any particular part of the country is susceptible, and, in general, whatever may be immediately connected with its agricultural advantage and prosperity, particularly in the manner of Arthur Young's Agricultural Tours, Radcliffe's Survey of the Agriculture of Flanders, the County Reports of England, Sinclair's Reports of the Agriculture, and his particular account of the Husbandry of Scotland.

"That such survey should particularly embrace the cultivation of the leading products of the country—maize, wheat, cotton, sugar, tobacco, hemp, wool and silk; the cultivation of the most valuable forest trees; together with other crops and products not less essential to comfort and use, but of less comparative importance and extent; and the character, rearing, and management of every species of live stock.

"That the information thus obtained should be immediately furnished to the Government, and measures taken for its general diffusion."

ERRATA.—Page 65, col. 3, line 16 from bottom, for *frost* read *forest.*—Page 59, col. 1, first line of 16th doubt, for *substances* read *such*—same paragraph, line 3, for *vapor* read *hepar.*

The Bots in Horses.

Bots have been accused of choking horses by crowding into their throats. We remember it was told us in years past as a secret, that talking Dutch to the horse, striking him with the flat of the hand, or rubbing him with a pitchfork handle, was only done to deceive the bystanders while *the doctor* slyly pushed the bots back from the gullet into the stomach. On this precious intelligence we make no remark.

Peter Ellis who killed a sick colt, says "Upon opening immediately after death, *the bots were found collected* into the small gut at the outlet of the maw, or first stomach. They had so completely closed the bowel that your finger could not be passed through. I have known several *horses choked to death* by these 'harmless insects' working themselves up into the oozen or gullet, and so completely stopping the passage. This I have discovered by immediate dissection."

John Smith of Dardenne in Missouri, says, "Mr. *Ellis* is perfectly correct in the statement that bots sometimes kill horses, by congregating so thickly *in the lower extremity of the gullet*, and also *in the passage from the stomach to the bowels*. Several horses within my knowledge, have died apparently from their accumulation at the entrance into the stomach, in such dense masses as to bid defiance to the entrance of any food into that organ." Amer. Far. vol. 14, p. 38.

It appears then that under particular circumstances, bots endeavor to escape from the stomach in *both* directions. It evidently cannot be a journey of pleasure that crowds them together in that manner; and would it avail any thing, we should earnestly inquire into the causes of so strange a retreat. Dr. *Harden* suggests that being "surrounded with the [colical] contents of the stomach they were for getting away in a hurry, and came in crowds to the orifice of the stomach—it was closed with spasm."

As the principal object of our remarks in this number will be to induce our readers more closely to investigate the natural history of the bots, we shall advert to some other particulars.

John Smith says "I will state a fact which seems entirely to have escaped the notice* of writers on this subject, viz. that *there are two distinct species* of these gad, bot, or nit, flies; in their general appearance having a near resemblance to each other, yet sufficiently distinct upon close inspection to be identified as a distinct species of insect. The fly which I suppose produces the *bot* is smaller than the other, and rather longer in proportion to its thickness, and rather a darker color; the light yellow color about the head and body being not quite so conspicuous; this (the smaller of the two species and which I consider the parent of the bot,)—deposits its eggs on the *under jaw* and on the *neck* of the horse, about the junction of the neck with the head, *and no where else.* Its vision is,—I apprehend from its habits,—rather indistinct, as it almost always misses its aim, *unless it passes between the forelegs of the horse* when about to deposit an egg; and frequently when it does so pass, if a man be standing near the horse's head, it often becomes confused,—when it uniformly abandons the horse for an interval of five, ten, or fifteen minutes, and then returns to deposit a single egg, and again retreats for another interval of like duration. From the antipathy* of the horse to this fly, I infer that it is a deadly enemy. My work horses always become entirely unmanageable when this fly attacks them; and I am compelled whenever one of them commences operations, to stop my team and watch for the periodical returns of the enemy, and from his uniform approach *between the fore-legs of the horse*, am enabled generally to succeed in catching it very soon, and *exhibiting it to my horse*, he immediately becomes pacified, and proceeds to labor with his accustomed calmness.

"The place of deposit of the egg, I think will account for the fact that old field horses, or *horses kept at pasture never have many bots.* The eggs are placed where the horse cannot reach them with his mouth, are never very numerous, and if they chance to drop among the grass, will generally fall entirely to the ground out of his reach, where they perish. Not so with well fed horses: the very act of eating out of the trough inevitably rubs the eggs loose from the lower jaws and throat of the horse, and *places them amongst his food*, with which they are carried to the stomach, the heat of which soon animates them. If Dr. Harden will select an egg from this location and *hatch it with his breath*, he will in all probability find it to be a young bot."

In the following extract from the Northern Farmer, the process of *hatching* the eggs of the "nitter" is particularly described, and it is highly curious. It will be perceived however, that only one species of *Œstrus* is referred to, and that this is the "leg nitter."

"That bots in horses proceed from the eggs or nits of a fly, somewhat resembling a bee in appearance and manners, has been a subject of traditionary belief; but by what way and means these eggs have found a passage into the stomach of the horse, has we believe *till recently* been a matter of conjecture. This insect deposits its eggs on those parts of the horse more immediately within reach of his mouth, and attaches each so strongly to a single hair (though in the most exposed situations on the legs and near the feet) that they are secured from accident by "flood and field," and there remain, and are carried hundreds of miles; and though the horse fords rivers, crosses deserts of sand, or plunges in mud, they are not to be detached from their place of deposit. Yet after all this, such is the wonderful economy of nature in relation to this insect, that *the moment the horse brings his warm soft lip wet with saliva in actual contact with the eggs thus attached to his hair, they are instantly hatched*, become living grubs, and enter the mouth of the horse; and though not more than the fourth of a line in length, they are exceedingly vigorous, and move about with great activity in the saliva of the horse's mouth, and with it descend into the stomach; and there remain attached to its inner coat in form of the bot-grub till the June following, when they relinquish their hold, and are deposited in the dunghill; and being transformed soon appear in the form of the bot-fly.

"Let any one after holding his hand for a few seconds in a vessel of warm water, of a temperature very little above blood heat, immediately pass it *gently* and *slowly* over the eggs, or nits of the bot-fly, which frequently cover large spaces on the fore legs, and about *the breast* of the horse; at the same time pressing them gently for a second or two, and he will find on close examination, *the living grub in great numbers*, and though minute, yet visible to the naked eye, *moving rapidly and vigorously through the water on his hand.*

"We are indebted to one of our patrons, a gentleman of much observation and intelligence in things useful, residing in Salem, N. Y. for the information which led to the above experiment; as well as for the following recipe for preventing bots in horses: 'Soon after the bot-fly commences depositing the eggs on the horse, take water a little more than blood warm, and with a linen or cotton cloth, wash those parts of the horse where the eggs are deposited, moving the hand gently over them; and repeat the washing as often as once a week, till the bot-fly disappears, and your horse will not be troubled with bots.'"

If the "throat nitter" (Œ. veterinus) is the true bot however, according to Professor Eaton's and J. Smith's opinion,—and if this always lays its eggs "in the skin" under the throat and jaws,—it must be evident that the remedy proposed by the correspondent of the Northern Farmer, is at least doubtful,—because it is designed to protect the horse against a different insect. With Professor E. we think that a piece of oil cloth (or even muslin) applied under the jaws and throat, would be a safe protection.

* It appears that he had not seen Eaton's Zoological Text Book.

* If Professor Eaton is correct in his observations, as we presume he is, (see page 17,)—that the acrid liquor which the insect deposits with the egg "in the skin," causes as severe a pain as the sting of a bee, the cause of this "antipathy" is sufficiently accounted for.

Gypsum and Ashes.

A writer in the Farmer's Register says that he has been in the habit of sowing ashes and plaster, mixed in equal parts, using the same quantity as he had formerly done of plaster alone, and that he has derived equal benefit from this mixture as from plaster alone, and he considers it a saving of fifty per cent. He prefers to have the ashes damp, as it enables him to sow with more regularity and in moderately windy weather.

Another writer in the Register recommends the application of twenty bushels of plaster to the acre on "thin land." He has used it on corn to that extent, with very decided advantage to that and the succeeding crops.

A writer in the American Farmer states that he doubles his corn crop by putting into each hill after the corn is dropped, a clam shell full of two parts of leached ashes and one of plaster.

For a very interesting article on the use of Gypsum, the reader is referred to another page of this paper.

We learn from the *Advocate of Science* that Dr. Harlan lately informed the Academy of Natural Sciences at Philadelphia, "that he had seen a letter from the Hon. Daniel Webster, stating that the vessel which had been sent to the North West Coast with *provisions*, &c. to the party of which Messrs. Nuttall and Townsend were attached, had been struck by lightning off Cape Horn, and was obliged to return without rendering them the contemplated assistance."

Experiments with Gypsum.

By the late JOHN TAYLOR *of Virginia.*

A few of the experiments I have made with gypsum are mentioned, to take a chance for adding a fact to your information on this subject.

1803, March 15. Oats and clover, both just up, plastered them at one bushel to the acre; three weeks after, plastered them again with the same quantity. Upon both occasions left the richest portion of the plat unplastered. This only produced one third, both of oats and clover, of the plastered land.

April. Mixed or rolled a bushel of plaster with as much seed corn, keeping it wet while planting. With such rolled seed planted a field of forty acres, except eight rows through the center which were unplastered. The land poor. The inferiority of these eight rows was visible, from the moment the corn was up to its being gathered.

1804. April. Rolled the seed corn of two hundred acres in like manner, leaving eight rows across the field, so as to intersect with flat, hilly, sandy, stiff, rich and poor land. Their inferiority was so visible, that from an eminence in the field, a stranger could point out the eight rows from the time the corn was three inches high, until it was all in tassel. In this the eight rows were a week later than the plastered corn. The plastered corn stood the best, was forwardest, and produced the greatest crop. Its fodder dried about ten days sooner.

1805 April. Plastered as above, the seed corn of 30 acres of rich *moist* land, leaving eight rows. Corn injured by too much rain. No difference between the eight rows and the rest.

May 7th. Replanted my corn on high land, which had been much destroyed by mice, moles and birds, mixing two quarts of tar well with one bushel of seed corn, and then plastering it as above. The best remedy I ever tried against those evils, and the plaster as usual accelerated and benefited the corn.

April 25th. Plastered three bushels on three acres of clover just up, sown alone on land half manured with coarse manure. A good crop.

May 9th Seven bushels on seven acres of forward wheat and clover. Wheat heading; land thin; the clover exceeded what such land had usually produced. No benefit to the wheat.

May 10th. Six bushels on six acres of very bad clover sown last spring. Clover just beginning to bloom. The season became moist, and it improved into a fine crop.

May 10th. Last spring I left an unplastered strip of 20 feet wide quite across a field of clover. It was all cut except this strip, which was so bad as not to be worth cutting. This spring on this day, (clover beginning to bloom,) the strip was still much inferior to the adjoining clover, which was good. I plastered it at a bushel to an acre, leaving the rest of the field unplastered. It equalled the adjoining clover in one month.

May 16th. Sowed 23 bushels on 23 acres of corn in a large field. Ploughed in part immediately, harrowed in part, and left part on the surface ten days before it was worked in. Corn four inches high. Weather moist. No difference between the three divisions. The seed of the whole field had been rolled. These 23 acres exceeded the adjoining corn 25 per cent.; its blades and tops also dried sooner.

June 15th. Plastered at three bushels to the acre, a strip of goose grass or English grass—no effect on land or grass.

August 10th. Sowed 50 acres of thin sandy land, in corn at the time, in clover, and 40 bushels of plaster on the seed, harrowing both lightly in. A moderate shower in four days, succeeded by a severe drouth. Clover sprouted and chiefly perished. A good cover of bird-foot clover followed; land so visibly improved, that a stranger could mark the line of the plastering by the growth. That and the adjoining land in corn in 1808. The difference visible in favor of the plastered land.

September 17th, to the 5th of October. Sowed 88 bushels of yellow latter bearded wheat; 171 of forward, mixing half a bushel of plaster with one of wheat, a little wetted. One bushel of forward, and three pecks of latter wheat were sown to an acre. All among corn. Two slips of 30 feet each were left across the field, in which unplastered wheat was sown. Where the land was sandy, the unplastered wheat was best, owing to the great growth of bird-foot clover among the plastered. This discovered the effect of gypsum on that annual grass. Where this grass did not appear, there was no difference between the plastered and unplastered wheat. From the spring of 1806 to this time, the unplastered slips have been distinctly marked, by a vast inferiority of the weeds and grass naturally produced.

November 23d. Sowed three bushels of plaster on one and a half acres of wheat, left unplastered for the purpose in the field last mentioned, on the surface. Weather moist. No effect on the wheat, on the ground, or in the growth to this day, though the plaster was of the same kind with that used in the last experiment.

1806, March and April. Sowed 200 acres of clover with plaster, at different times when the weather was dry, moist, windy, and still, part at three pecks—a bushel and five pecks to the acre, leaving a slip of 20 feet wide across the field, to ascertain the goodness of the plaster, which was of a hard white kind, that hitherto used being soft and streaked. The clover in this strip was bad, on each side of it fine. No apparent difference was produced by weather, quantity or times of sowing. The whole crop far surpassed in goodness what ever such lands had produced before, except the slip, as to which Pharaoh's dream seemed reversed.

April and May. Rolled all my seed corn as usual, leaving slips unplastered. An excessive drouth. No difference between these slips and the rest of the field. The following year when that grass grew, tufts of luxuriant bird-foot clover designated the exact spots where the plastered corn had been planted.

April 23d. Sowed 16 bushels of plaster on eight acres of oats and clover, just up, intending to have a great crop, and leaving a slip. Land naturally fine and highly manured. Drouth as above, excessive. Oats bad. No difference between the slip and the rest. Clover killed. Land ploughed up in September and put in wheat. Clover sown in 1807 on the wheat. A heavy crop of wheat, clover plastered in March, 1808; at a bushel to the acre; crop very great. No inferiority in the slip unplastered in 1806.

1807, March 1st to 12th. Sowed clover seed on one hundred acres in wheat, and 80 bushels of plaster, the sowers of the latter following those of the former. Left a strip of 20 feet. Weather dry, moist, windy or calm, and for two days of the sowing a snow two inches or less deep on the ground. Land stiff, rich, poor or sandy, and of several intermediate qualities. The clover came up better than any I ever sowed on the surface; the strip was a little, and but a little, inferior to the adjoining clover, which I attributed to its receiving some plaster from the effect of a high wind. The whole field received three pecks to the acre in 1808, and was the best piece of high land grass of the size I ever saw. The wheat received no benefit.

March 10th. Sowed 40 bushels of plaster on 60 acres of poor land, cultivated in corn (Indian) last year, and well set with bird-foot clover, leaving an unplastered slip. Weather dry and windy. Effect vast. Strip visible to an inch, as far off as you could distinguish grass. The bird-foot clover died, and a crop of crab grass shot up through it, and furnished a second cover to the land.

1807 and 1808. In these two years all my corn ground, as it was broken up or listed, has been plastered broad-cast, with from three pecks to a bushel to the acre, and directly ploughed in, and both the seed corn and seed wheat have been rolled bushel to bushel. In both, the crops have greatly exceeded what the fields have ever before produced. That cultivated last year has doubled any former product. But they have been aided in spots with manure, and the years were uncommonly fruitful. All the manure carried out in these two years, has been sprinkled with plaster when spread, before being ploughed in, and several fields of the bird-foot clover have been plastered. The results conform to those already mentioned.

1808. February. Plastered four ridges of highland meadow oat at a bushel to the acre. No effect.

Some of the inferences I make from these experiments are, that gypsum should be worked into the earth; that half a bushel or less to an acre, worked in, will improve land considerably; that drouth can defeat its effects upon corn, but not upon the land, if it is covered; that the weather is of no consequence at the moment it is sown, though the subsequent season is of great; that it may vastly improve red clover even as late as May; that it increases the effects of coarse manure; that a quantity less than half a bushel to an acre is in some cases as effectual as a much larger one; that excessive moisture or excessive drouth destroys its effect; that its effect is more likely to be destroyed when sprinkled on the surface, than when mixed with the earth; that sowing it broad-cast among Indian corn after it is up, may improve the crop 25 per cent.; that sown in June, it may not improve English grass; that sown in August and covered, it may improve the land, though drouth succeed; that sown on wheat in November, it may neither benefit the wheat nor land; that about three pecks to the acre immediately sprinkled on clover seed sown on the surface, may cause it to come up, live, and thrive better; that a similar quantity sown on the surface in March, may treble the burden of bird-foot clover; that sown broad-cast from the 1st of January in breaking up or listing corn ground, the same quantity will probably add considerably to the crop: and that it may not improve the high land meadow oat if sown in February.

Meteorological Table,

KEPT AT ROCHESTER, FOR FEBRUARY, 1835.

	10 A. M.				10 P. M.			
Days	therm.	barometer.	winds	sky	therm.	barometer	winds.	sky
1	30	29,15	W	cloudy	12	29,25	N W	cloudy*a*
2	20	29,50	W	do	11	29,70	N	fair*a*
3	20	29,85	E	fair	12	29,80	N E	cloudy*a*
4	9	29,60	W	do	12	29,50	W	do
5	15	29,40	W	do	17	29,40	W	do
6	18	29,30	N W	cloudy	18	29,40	N W	fair
7	8	29,30	N W	do	4	29,35	N W	cloudy
8	5	29,40	N W	do	10	29,60	N W	fair*b*
9	10	29,70	W	fair	7	29,70	W	do*c*
10	18	29,65	W	do	14	29,55	S W	do
11	20	29,35	S W	cloudy	22	29,45	N W	cloudy*c*
12	20	29,55	W	fair	28	29,25	S	fair
13	30	29,15	S W	cloudy	27	29,35	S W	cloudy
14	15	29,90	N W	fair	8	30,05	N W	fair
15	22	29,90	S	do	24	29,85	S E	cloudy
16	30	29,80	S E	cloudy	28	29,70	S E	do*d*
17	40	29,60	S E	do	31	29,55	E	do
18	36	29,45	E	do	36	29,45	S	do
19	32	29,55	W	do	26	29,80	W	do
20	30	29,80	W	do	30	29,60	W	do
21	46	29,45	S W	do	45	29,45	S W	do*e*
22	50	29,25	S W	do	33	29,55	N W	fair*e*
23	42	29,85	W	fair	27	29,75	N W	do
24	38	29,80	S	do	40	29,60	S	cloudy
25	40	29,40	W	do	23	29,50	W	fair
26	15	29,60	N W	do	11	29,65	N W	do
27	14	29,60	W	do	7	29,50	N W	do
28	10	29,50	N W	cloudy	9	29,65	N W	do

MEANS.—Ther. 22.5—Barom. 29.56—Rain 8 inches—snow 17 inches.

Spring water, Feb. 15, 40°

a Snow 1 inch—*b* snow 6 in.—*c* snow 2 in.—*d* snow 4 in.—*e* rain.

COMMUNICATIONS.

Culture of the White Mulberry.

BY JAMES HOUGHTON.

Mr. Tucker—I now venture to give you a statement of my mode of cultivating the White Italian Mulberry for the raising of silk, and should you deem it worthy a place in your highly valuable journal, you are at liberty to insert it. Excuse me for the digression, but I must assert that your Genesee Farmer only wants to be once read to ensure it ample support, for that all concerned in Agriculture or Horticulture may derive great benefit in some way or other from it, is most certain. But young farmers like myself want to see statements made of any failure in crops from bad, as well as the success attendant on good management, as such results conveyed through your paper confer great benefit by causing others to avoid the errors thus detailed.

Now to my original subject. In May, 1833, I ploughed a strip of ground seven feet by forty rods, twice, and harrowed it well, so as to give a mellow surface. In the first week of June I sowed four ounces of seed in drills fifteen inches apart, and they came up in twenty one days very well. The end of July I finished weeding them the first time. I should here remark, the evident superiority of the plants sown on the good portion of the strip, which land was rich light loam, the other part rather inclined to clay, and at this period the former were six inches high and the latter three inches only, and having a sickly appearance. The end of August I began to weed again, but did not finish more than two thirds of them to my loss, for from this time till the early frost in November those which were weeded made a very rapid growth of good ripe wood from fifteen to eighteen inches high, with many lateral branches, while the others were scarcely seven inches high, clearly proving that a little well attended is far better than much badly. The end of November I took them all up by raising the earth close to the plants with a common dung fork, so that drawing did not injure the roots. I then sorted them in sizes and put them in the cellar, laying them down one hundred in a bunch, and covering the roots with loam, keeping them moist all winter. I found I had 17,000 plants in all.

On the 27th of March, having prepared my ground, I took from the cellar 1,000 at a time, and they looked quite fresh, with the buds swelling, and began to plant them in hedge form—one of sixteen rods long, a double row, eighteen inches apart, and twelve inches apart in the row. This one hedge was kept free from weeds, and considering the season, being very dry, and the May frosts cutting the first shoots entirely off, did very well.

Another hedge of thirty six rods, but not quite so well attended, and planted in one row twelve inches apart, yet did very well, not being so much exposed to the sun, being on the north side of a board fence.

I then planted out in a large bed one foot apart all ways, till I only had 2,000 left. My back beginning to ache so much, and the plants being small, I gave them a chance by laying them in by the heels in a small trench as close as they could be put together, and earthed them up, little expecting any good from them; but I weeded these three times during the season; those in the bed were in part only even weeded once, and the small ones had the advantage although only laid in, of four inches in hight. These, about 12,000, I intend to plant into hedge rows in front of my house this next April, thirteen rods in length and about twenty feet apart and cultivate the ground between them.

The raising of these, beyond the seed and my own labor, has cost me only about three dollars, as I did all myself. In addition to these, I have two hundred trees four years old, one hundred and sixty planted in a hedge two feet apart, which by the bye, are too far over to make a good hedge, and forty planted out for standard trees; and I purpose, this season, with the aid of a large tree in this vicinity, to raise about 60,000 worms providing I can get the eggs, and shall be glad if any of your subscribers can assist me with some by leaving them at your office, or word where I can apply for them; and I will, if you wish, give you an account of my success at the end of the season.

It has often occurred to me that more seed in grain crops might be put into the ground to advantage, than is often used. Wheat in particular does not appear to me to stand thick enough when in ear, and I have tried an experiment on two and a half acres this last September, which had before been in wheat, the first crop bringing twenty one bushels to the acre. I ploughed it three times, the first time very deep. I then sowed on the piece five bushels of white flint wheat, being first well limed. I then harrowed it once, and sowed by hand, having no other convenience at that time, five bushels of slacked lime and harrowed a second time cross ways, and I intend to seed down with Timothy and broad leaf red clover the first day the snow is again on the ground, and roll it with a heavy roller as soon after as the ground will permit; and, good or bad luck attend me, I will inform you of the result if you desire it, for the benefit of others. I have extended my observations far beyond what I first intended, so I now submit them for your curtailment if necessary.

I remain, sir, yours respectfully,

James Houghton.

Carthage, March 11, 1835.

Hoven Cattle.

BY HOLKHAM.

From the number of articles coming from intelligent and respectable correspondents of the Farmer, upon the subject of Hoven Cattle, we have been led to believe that a very simple contrivance, that we have used several years, which can be made by any body who knows how to sew leather, and which is an effectual remedy for this dangerous complaint, is unknown to many around us. The trite remark that, when any discovery is made, combining extreme simplicity with extensive usefulness, we wonder it was not made before, applies with peculiar force to this invention; and it is truly astonishing that such dangerous (and from henceforth we may add absurd) remedies, as stabbing cattle in the bowels with knives, dirks, and other weapons, or dosing them with cathartics and poisonous substances, should be adopted and so long persevered in, when a little exercise of our thinking faculties, would furnish a more efficacious mode of effecting the same objects.

The contrivance in question, is merely a cylindrical tube of about three or four feet in length, made of harness or sole leather, sufficiently stiff to keep it distended, covered at the end with a perforated circular piece of lead or soft metal. When used it is promptly run down the ox or cow's throat, until it reaches the place where the wind or gaseous matter has collected, and without any other application whatever, the wind rushes through it, out of the mouth of the distressed animal, sometimes with so much noise as to be heard at a surprising distance. The relief is instantaneous.

The original invention has been greatly improved by placing in the end of the leather tube, a hollow leaden sphere or ellipse, perforated as before with ten or twelve holes of sufficient capacity to admit the passage of air into the tube, say one sixth of an inch in diameter. We say improved, although the effect is the same, because a round surface is thereby pressed along the interior of the throat instead of an angular one, and being placed with a segment of the sphere inside the tube is drawn out with greater safety and facility.

An additional improvement is now adopted. It consists in fixing in the other end of the tube a segment of a similar sphere, somewhat enlarged, with the concavity placed externally, and perforated with a single hole in the center. This end is used to force potatoes, apples, or other articles with which cattle are apt to be suffocated, down the throat.

Holkham.

Drag-log or Drag-roller.

BY T. S. P.

An implement has been in use in this part of the country for several years, which I have not seen elsewhere. It was invented by Thomas B. Gay, a practical and intelligent farmer of this county, and though it has perhaps only been adopted by some Agriculturists in this vicinity, who are in the habit of preparing their grounds neatly for the reception of seed, yet it deserves to be better and more extensively known.

The implement is called indifferently *Drag-log* or *Drag-roller*, and differs in principle from the common roller by being deprived of the rotary motion, and consequently *drawn* or *dragged* over the land. Such farmers as have used it fully concur in the opinion—to the correctness of which I can also attest from my own experience—that it is not only a convenient but frequently indispensible agent in reducing rough or cloddy ground. The most stubborn piece of land may, by one or at most two timely operations, be pulverized more completely than by double or treble the number of plowings. The first application should be made immediately after the land is turned over—that is to say, all land plowed during the day should be subjected to the operation in the afternoon. When such land comes to be re-plowed, it will always be found in a light and friable condition.

The Drag-roller is not recommended for the purpose of being substituted for the common roller, or in any manner superseding it. The re-

spective merits of the implements rest on different bases. The common roller must remain highly useful in giving a smooth surface to land in order to enable the scytheman to harvest the crop with facility. The Drag-roller is intended to assist in the preparation of the ground for the reception of seed; and will be found exceedingly beneficial in attaining this object in all spring and summer fallows. When the plowing has been done in the fall or winter, the action of the frost alone will produce the desired effect. On grass or sward land well turned over, it will aid in smothering such roots or spears as might otherwise grow, by filling the interstices with the loose mould.

The construction of the Drag-roller is sufficiently simple. The piece of timber may be about six feet long, and eighteen or twenty inches in diameter, which may be lightened to any extent by taking from the upper side: one third or even one half may be hewed off according to the size of the log. Two pieces of scantling introduced obliquely by mortice and tennon at a suitable distance from the ends of the log, and made fast to each other opposite to the middle, completes the fixture, which may be drawn by either horses or oxen. It is desirable to have the diameter of the size recommended, that the implement may pass smoothly over the ground:—if too small, the earth will gather before it, by which the progress will be impeded, and the efficiency of the operation impaired. T. S. P.

Goochland county, Va., 2 mo. 27.

Columbian Straw Cutter.

BY THE PATENTEE.

Mr. Tucker—In reply to the inquiry of "W. T. C." in a former number of the Farmer, in relation to the Columbian Straw Cutter, I would state that when I exhibited the machine alluded to in this place, I did not reside here and immediately left the city. Sickness and other unavoidable circumstances, have prevented me from making any machines except for agents to vend rights in other states, till the present time. I now reside in this city, and have commenced making these machines in connection with Mr. Alpheus Kilbourn, cabinet maker, near the west end of the river bridge, where they can be had, at present only on short notice, as we completed the first only a few days since, and two have already been bespoken. We intend, however, soon to have them on hand

Under these circumstances I cannot, as requested, give the opinion of the public at large respecting the merit of the Columbian Straw Cutter, but I subjoin a certificate from several gentlemen, mechanics, and others, who are acquainted with the different machines for cutting straw, &c.

The price of such as we now make is $25. The weight about 160 *lbs.*—106 of which is iron. The size is about two feet in width, four in length, and three in hight, and may be transported either in a boat or waggon.

Although the design was to have the cutting performed by manual labor, yet had it been a particular object to adapt it to horse or water power, it could not have been better constructed for that purpose. The public are invited to call and examine for themselves.

Rights for towns, counties, or states, may be had on reasonable terms. A few respectable men may have employ as agents in vending Rights. Respectfully yours,

Noah Davis, *Patentee.*

CERTIFICATE.

This certifies that we have examined the Columbian Straw-Cutter, now in use at Mr. Christopher's Livery Stable in this city, exhibited by Noah Davis and Alpheus Kilbourn; and taking into view its apparent durability—the capacity and certainty of cutting—the manner of feeding and of varying the cut to any length required, we freely say that, in our opinion, for cutting hay, straw, oats in the sheaf, and corn stalks, it is preferable to any machine heretofore offered.—Rochester, March 12, 1835.

Arist. Champion,	William Charles,
Thomas Hart,	H. H. Crane,
Calvin Oaks,	Joseph Christopher,
Alvin Isbell,	Jona. Blinn,
P. P. Peck,	W. Griffith,*
Edward Penny,	Hiram Wright,
H. Witbeck,	S. A. Starr.

* Mr. Griffith, before seeing the "Columbian Straw-Cutter," purchased five at Boston of another kind, at $35,00 each, for cutting feed for horses on the Erie Canal.

☞ Editors would much oblige the Patentee by copying the above.

Valuable Tables.

BY CALEB COULTER.

Mr. Tucker—Your appeal to subscribers in your last number (8) to "come up to your help," is quite irresistible. Having derived much benefit from your valuable publication myself, I am extremely anxious that its character for usefulness should be sustained; but how far any contribution of mine may assist in doing so is extremely doubtful—my practical experience being but little, and my theoretical knowledge less. As, however, "every *little* helps," I shall venture to send you an article or two selected from my *Scrap Book*, and which, as I have found them useful to myself, I trust may be likely to benefit others The first is

Directions for measuring Cattle, so as to ascertain their weight while living.

This was communicated to me, several years ago, by an experienced Grazier; and having had frequent opportunities of testing it by practice, I can safely recommend it as coming to the mark within a mere trifle.

Take a string, put it round the beast, standing square, just behind the shoulder-blade; measure on a foot-rule the feet and inches he is in circumference, and call this the *girth:* then, with a string, measure from that bone of the tail which plumbs the line with the hinder part of the buttock, directing the string along the back to the fore part of the shoulder-blade; take the dimensions on the foot-rule as before, and call this the *length.* Multiply the *girth* by the *length,* (inches by inches, and feet by feet,) and this product again by the number corresponding to the girth in the subjoined table—the last product will be the answer in pounds of the weight of the four quarters, sinking the offal, and as exact as is at all necessary for any computation, or for the purpose of valuing stock.

Table.

If the girth be less than 3 feet, multiply by 11.
If more than 3 and less than 5...."...16.
If more than 5 and less than 7...."...23.
If more than 7 and less than 9...."...31.

Example.—I find the girth of a steer to be 6*ft.* 4*in.*
Length along the back.....5" 3"

31 0

By multiplying them together in the manner directed, I obtain a product of 31 feet—and that again multiplied by 23 (the girth being more than 5 and less than 7 feet) will give me 713 lbs., the weight of the four quarters.

Again—Suppose a pig, or any small beast, should measure two feet seven inches in girth, and two feet three inches in length. His weight will be sixty-three pounds and a quarter.

Girth.....2 7
Length....2 3

5 9
Multiplier... 11

Lbs. 63 3—viz. 63 lbs. 3-12ths, equal to ¼th

Again—The dimensions of a hog, calf, &c. are as follows:

Girth.....4 6
Length.....3 9

16 6
Multiplier..... 16

Lbs. 264

Again—A fat ox measures, we shall say,

Girth.....8 4
Length.....7 3

57 0
Multiplier....31

Lbs. 1767

Having given examples of all the four multipliers, I suppose it needless to proceed farther. *Note,* however, that a deduction must be made for a half-fatted beast of 1 stone in 20 from that of a fat one—that is, of 14 lbs. in every 280—and for a cow that has had calves the same allowance is to be made, even should she be properly fatted. A *measuring tape* will be found more convenient than the string and rule.

I shall now give you two tables for the purpose of ascertaining the relative produce per acre of any crop, either by *measure,* as for grain, or by *weight,* as for turneps, hay, &c.

MEASURE.		WEIGHT.							
Per square rod	*Bu. per acre.*	*Per square yard.*	*Produce per acre.*			*Per square yard.*	*Produce per acre.*		
			st's.	*lbs.*	*oz.*		*t'ns.*	*cwt.*	*st.* *lbs*
½ pint	1¼	oz.				lbs.			
1 pint	2½	1	21	8	8	1	2	3	1 10
1 quart	5	2	43	3	0	2	4	6	3 6
2 quarts	10	3	64	11	8	3	6	9	5 2
1 gallon	20	4	86	6	0	4	8	12	6 12
1 peck	40	5	108	0	8	5	10	16	0 8
2 pecks	80	6	129	9	0	6	12	19	2 4
1 bushel	160	7	151	3	8	7	15	2	4 0
		8	172	12	0	8	17	5	5 10
		9	194	6	8	9	19	8	7 6
		10	216	1	0	10	21	12	1 2
		11	237	9	8	11	23	15	2 12
		12	259	4	0	12	25	18	4 8
		13	280	12	8	13	28	1	6 4
		14	302	7	0	14	30	5	0 0
		15	324	1	8				

Example.—Suppose you wish to ascertain the produce of your wheat crop, or are called in to value a field of wheat to be sold standing—select a part of it which you consider to be about on an average with the whole, and proceed thus: Provide a straight rod of 16½ feet long, and with it measure a square in the spot selected; reap and thrash carefully the wheat standing within this square, and then measure the produce. By reference to the table of *measure,* the number of bushels per acre will be correctly ascertained. For instance, you find the produce per square rod to be 1 gallon 1 pint—the field will yield 22½ bushels per acre—viz. 20 bushels for the gallon, and 2½ for the pint.

Again—you wish to know how your potatoes will yield—the contents of the square rod are found to be one bushel, two pecks and two quarts—for the bushel you have in the table 160, for the two pecks 80, and for the two quarts 10 bushels—making in all 250 bushels per acre. Should it not be convenient to make the experiment upon so much as a square rod or perch, take the half of it—let your measuring rod be 8 feet 3 inches long, and with it lay off a square; proceed as before, and *double* the number of bushels corresponding to the produce of a square

rod in the table. An example will make it plain. I have a field of oats ready to be cut, and I wish to know how much it will produce—having ascertained the quantity in the *square half rod* to be 1 gallon, 1 quart, and half a pint, I look out for the produce corresponding to each in the table, and find them to amount together to 26¼ bushels—which, being doubled, will give 52½ bushels per acre.

To calculate the *weight* of your crop by the second table—as a square yard is too minute a division of an acre, take a *nine feet rod* and measure a square of 9 feet, which is equal to 9 square yards; weigh the produce and divide by 9, which will give the weight per square yard; and, in the corresponding line of the table, the weight per acre. Where ounces occur in the weight, refer to the column of ounces in the same manner, and add the result to the weight.

Example.—It is required to ascertain the number of tons of hay per acre a meadow will give. which is about to be mowed. Measure off the 9 square yards of grass as directed; mow it, and dry the hay separately from the rest, and weigh it. Say it weighs 9 lbs.—divided by 9 gives 1 lb., the produce per acre of which, is 2 tons 3 cwt. 1 st. 10 lbs. However, suppose the weight to be 8 lbs. 12 oz.—divide this by 9, and it will give you a quotient of 15 5-9ths, or 15½ oz.: in the table you will find the produce of 15 ounces to be 324 stones 1 lb. 8 oz.—to which add, if you think it worth while, half the produce of 1 oz., which you will find to be 10 stones 11 lbs. 4 oz., and the sum will be 334 stone 12 lbs. 12 oz.—equal to 2 tons 2 cwt. 96 lbs. 12 oz.; but as such great nicety of calculation will not be necessary in the matter of *hay*, you may safely say that the meadow will yield *upwards* of 2 tons and 2 cwt. per acre.

This table will also serve as a guide in measuring land, and may prove useful in other processes of husbandry, where the relative scale is applicable.

Should the above "*two mites*" be considered of sufficient value to be admitted into "*the treasury*" of the Genesee Farmer, they are respectfully presented for that purpose, as an humble offering to one of the most useful publications to which I have ever subscribed the name of

CALEB COULTER.

Hamamelis virginica—*Witch Hazel.*

BY W. W. B.

What admirer of nature, in passing through our forests and woodlands in the sober months of Autumn, has not been charmed with the appearance of this shrub? When the year has matured its flowers and fruits, the chill frosts of Autumn withered and seared the leaves of the forest, and its bleak winds have brought them to the ground, then it is that the Hamamelis puts forth its blossoms for the fruit of the succeeding summer, and presents altogether an *unique* and singular appearance, forming a striking contrast with the rest of the surrounding scenery. Its own leaves have faded and fallen; and we behold its numerous little golden flowers, with slender petals, covering its leafless branches, which continue in their freshness till winter. I have often seen them peeping out from under the new fallen snow of a mild December. Seen amid the deep verdure of evergreens, they present a beautiful sight, and remind the classical reader of Virgil's "*Aureus ramus*," or *Golden bough*, in the grove of Avernus, to which the birds of Venus directed the steps of the hero Æneas, and which was to obtain for him an entrance into the shades of Tartarus. Associated with it are some of the dearest recollections of my boyhood, when I rambled through the woods, sported beneath its shade in summer, picked up its tiny fruit, and plucked its yellow branches in autumn, or stripped off its bark for the coloring operations of my mother in winter.

To a contemplative mind, there is something in the Hamamelis, when in bloom, to please, beyond the mere singularity of its appearance or external beauty. It is invested with a moral beauty, for it forcibly reminds us of truths which are of the utmost interest and importance to man. It is an emblem of that hope of the good man, the christian, which flourishes the fresher and brighter amid the decays of nature, the witherings of disease and the frosts of age, when the winter of death approaches. Especially it is an emblem of that immortality which is the object of this hope. It speaks of life from the dead, of the bloom of immortal youth, and beauty beyond the grave. W. W. B.

Recipe for Making Vinegar.

BY OBVIOUS.

You have copied from the American Farmer into your paper, vol. 4th, page 364, "short directions for making vinegar," which are as follows:

"To 10 gallons of rain-water, add one gallon molasses and one of brandy—mix them well together, and place the cask in a garret or some warm dry place, and occasionally shaking it, in a few months it will be fit for use."

Twelve gallons of the above mixture will cost as follows, viz:—

1 gallon molasses,.....	$0 50
1 gallon brandy,(adulterated whiskey,)	1 50
	$2 00

I would propose a much cheaper way for families to be supplied with this indispensable article, viz:

Take one barrel of cider,—pure juice of the apple,—divide it into two parts—add one gallon clean rain water to each part, place the casks and treat them as above directed, and you will have thirty gallons of vinegar, of superior flavor and much more enduring body than that made of whiskey and molasses, and at the same or a much less price. The advantage of dividing the quantity is that it will be sooner fit for use.

February, 1835. OBVIOUS.

From the American Gardener's Magazine.

Planting an Orchard.

Detail of a Method adopted in Planting out an Orchard of six acres with Apple and Pear Trees, in 1830 *and* 1831; *Deep Planting dispensed with.*

All the varieties of fruits known to the writer, that were deemed important to the wants, or embellishments of the garden or orchard, had been procured previous to the organization of the Massachusetts Horticultural Society. By the formation of this excellent society, however, and the exertions of several of its members, a great number of new and valuable fruits were brought into notice, by its extensive correspondence with other similar societies in Europe, and on the continent. Such as had been tasted, or highly recommended by the committee, were deemed of sufficient value and importance to be added to the selection, which embraced a large number of varieties. A piece of land was decided upon, which was thought the best suited for the growth and future health of the trees, the embellishment of the place, and least liable to be encroached upon by future alterations of improvements upon the farm.

Agreeing with Dr. Johnson, that "with method, almost any thing may be done, and without method, nothing well done," the following system was adopted:—A plan of the land was procured; the distances from which each tree was to be placed from the other, each way, was decided upon, which averaged about thirty-three feet; a reference book in connection with the plan of the land was next procured, and on it was designated each variety of tree, in its relative position. The land was then prepared, by taking from its surface all the stones, stumps, trees, shrubs, bushes, &c., all holes or uneven places were filled up, and the ground made as level as possible; the land was then ploughed deep, with the sod smoothly inverted; it was also harrowed five times lengthwise of the furrows, previous to planting, which caused the soil to be broken up fine, without disturbing the sods.

The trees were selected from the various nurseries around Boston, Salem, New-York, Albany and Philadelphia, amounting to one hundred and eight varieties of apples, and forty-two of pears,—in all two hundred and twenty trees. The trees were all forwarded to me in the fall of 1830, and placed in a trench dug sufficiently deep to cover the roots, and secure them from the frosts and cold of winter, to be ready for planting out in the ensuing spring. Each variety had been noted and labelled while in the trench, in such a manner, as to guard against the loss of their names. Previous to setting out the trees in the spring of 1831, in their intended places, the land had been well manured, and harrowed in. Placing the plan on a board with the reference book, the respective place of each tree with their proper distances was easily found with the aid of a surveyor's chain; from one to two inches only of the soil was taken from the sod, and the trees carefully planted,—previously to which, however, they were properly and judiciously pruned, and the roots trimmed of all broken or bruised fragments, if in some instances it could be said they had roots. In this manner the whole number were placed out, and covered with a little free rich mould, not *over* two inches, puddled with river water, and gently trod. This was done in the last week in April, and serious doubts were apprehended whether they would in this manner stand alone. The land was planted between the trees with corn and potatoes, without further ploughing, and an excellent crop was obtained; but *two* trees died, and only four more required additional soil on their roots; and so far, I have never had trees do better, during twenty years' experience, in the management of an orchard of twenty acres. I have no doubt, had the land been deeply trenched to the depth of one or two feet, and from six to twelve feet in diameter, where each tree was set, they would have done much better; but this is too forbidding to most persons.

I have only aimed in this communication to give you what I consider practicable. In all cases I would impress upon the gardener, orchardist, or farmer, to avoid deep planting, as it is not necessary to preserve trees from high winds, and is absolutely deleterious to their future progress and health. Yours, B. V. F.

Boston, Feb. 10th, 1835.

On Sowing Grass Seeds.

A diversity of opinion exists relative to the best time for sowing grass seeds. Some prefer the fall; but the majority of those who have written on the subject recommend sowing in the spring; and that season, so far as our acquaintance extends, is most generally chosen. European writers direct, even when grass seed is sown on the same ground with winter grain, to sow the grass seed in the spring, and *harrow it in*. They say that harrowing will on the whole be of service to the grain, though a few of the plants will be torn up by the process. The Hon. Richard Peters, likewise directed to "harrow your winter grain in the spring, in the direction of the seed furrows, or drills, and be not afraid of disturbing a few plants; manifold produce will remunerate for the destroyed."

The *Farmer's Assistant* says, "Clover may be sown with barley, oats, or spring wheat, when that article is raised; or it may be sown with winter wheat in the fall, if the land be dry, and

warmly exposed; or in the spring, when it should be lightly harrowed in." The *Domestic Encyclopedia* asserts that "experienced farmers generally prefer sowing clover with wheat rather than with barley or oats, as in dry seasons the clover frequently overpowers the oats or barley, and if it be sown late in order to obviate this evil, it often fails, and the crop is lost for that season. Probably the diversity of opinion respecting the proper time of sowing clover seed may arise from the difference in the nature of the soils on which trials have been made. An experienced agriculturist, (Edward Duffield, Esq. of Philadelphia County) assures Dr. Mease that he repeatedly failed in obtaining a crop, when he sowed his clover in autumn, or winter; and he is uniformly successful when he sows in the spring. His soil is a light loam."

There is likewise a great difference of opinion as respects the *quantity of seed* to be sown when land is laid down to grass. Sir John Sinclair says, "it is a great error, in laying land down to grass, to sow an insufficient quantity of seeds. In general, 12 to 14 lbs. of clover is the usual average allowance. But that quantity it is contended, ought greatly to be increased, and in many cases doubled." The Farmer's Assistant tells us that "the quantity of red clover seed to be sown on the acre is about fourteen pounds, and none but clean seed ought to be sown."

The "Memoirs of the Board of Agriculture of the State of New-York," vol. ii, p. 30, in giving an account of the methods of culture adopted by farmers in Rensselaer county, state that "Farmers differ in opinion in regard to the most suitable quantity of seed. S. Germond, H. Worthington, C. Porter, C. R. Colden, and some others, say that eight quarts of the mixture of clover and timothy seed should be sown on every acre. And Col. J. Carpenter sows sixteen quarts on an acre. He says when the grass and clover grow very thick, it will be more tender feed, and more fine hay, and that it will not run out so soon. But J. Philips, G. Eddy, and many others, consider four quarts as sufficient.

"All agree that the proportions of the mixture of the seeds should be governed by the nature of the soil. That in a sandy soil three-fourths of the seed should be clover—in clay loam it should be equal parts, in clay soil but one-fourth clover seed.

"There should be at least a bushel of plaster sown on every acre of clover and grass land of a sandy, gravelly, or loamy soil. Also on all upland natural meadows. Two bushels per acre are much better than one on a sandy or gravelly soil."

Payson Williams, Esq. of Fitchburgh, Mass. who received a premium from the Mass. Agr. Society, for the greatest quantity of spring wheat, raised by him in the summer of 1822, in giving a description of the mode of culture by him adopted, says, "the quantity of grass seed used by me is never less than twelve pounds of clover, and one peck of herd's grass (timothy) to the acre. Here permit me to observe, that innumerable are the instances in this country, where the farmer fails in his grass crops by not allowing seed enough; and what is worse, the little he does give, with a sparing hand, is suffered to take its chance under that pest of agriculture called the bush harrow, which not only drags stones and other loose matters into heaps, but leaves the soil dead and heavy, and does not cover the seed deep enough to strive with our July drouth effectually."

We have, however, been verbally assured by very correct and scientific agriculturists, that 6 or 7 pounds of clover seed, *where the ground is highly manured*, is amply sufficient, and that by exceeding that quantity, the plants so shade and stifle each other, that there is little substance in the hay made from them. No doubt much depends on the quality and richness of the soil. The poorer the soil the greater the quantity of grass seed. Clover seed of a bright yellow, with a good quantity of the purple and brown colored seed among it, (which shows the maturity of the seed) should be preferred.—*Complete Farmer.*

Carrots for Butter.

Mr. Fessenden—We have been trying the effect of carrots for butter for several weeks past, agreeably to a suggestion in your paper of January last. Our mode has been to take four carrots of the Altringham kind, of about one and a half inches in diameter, to cream enough to make ten pounds of butter, and after washing them clean, to grate them and cover them with new milk, and after they have stood ten minutes, to squeeze them through a cloth into the cream, and the effect has been to make the butter come quicker and give it the color and sweetness of May butter; so sweet and waxy has been the butter made in this way, that those persons who have eaten of it, could not believe they were eating winter butter. We consider it the greatest improvement we have ever known in making butter at this season.—*New-England Farmer.*

On Raising Lambs.

Great care should be taken in raising lambs, for when they are born, it is frequently the case that their fore teeth are not cut, which makes it very difficult for them to hold the teat so as to suck when young and weak, and it is common for lambs to get discouraged though ever so rugged at first. To remedy this evil, rub the thumb nail, or other hard substance, over the gums sufficiently hard to cause the teeth to cut through, and the lambs will then be able to suck without any difficulty.—*Yankee Farmer.*

List of Payments

For the Farmer from March 13, *to March* 19, 1835.

H. Mittleberger, to July, 1836.

For the Fifth Volume.

Isaac Jacobs.	Homer C. Davis.
John Andrews.	James Hillis.
John Jackson.	Wm. D Leflar.
Wm. Culver.	Capt. N. Leonard, 2 copies.
Erastus Cook, 4 & 5.	Wm. S. Burling.
Jacob Isenhouse.	Thomas Burling.
Hiram Wood.	

Reuben D. Dodge.

To July, 1835.

Richard Ashley.	Abram Fairchild.
Wm. E. Hutton.	Wm. Greene.

More New and Valuable Seeds.

JUST received at the "Rochester Seed Store," in addition to the former assortment, many choice kinds of seeds, including new White Italian Mulberry, Dyer's Madder, and Dale's New Hybrid Turnep. Also, a few quarts of the new and celebrated Skinless Oats, Bonavista Beans, Early Golden Sioux Corn, &c.; together with some hundred varieties of *Flower Seeds*, which will be put up in small papers at 6*d*. each, or 20 varieties for $1, and 100 varieties for $4. When the selection is left to the proprietors, care will be taken to select such as will form a pleasing assortment as to color, time of flowering, &c.

REYNOLDS & BATEHAN.

A large and comprehensive Catalogue of the Establishment is just published, and will be furnished gratis on application. mar 19

New-England Seed Store.

AT the *Agricutural and Horticnltural Warehouse* connected with the New-England Farmer, the subscriber continues the Seed Establishment, and now offers to dealers, Gardeners, and the public generally, an unrivalled collection of

GARDEN, GRASS, & FLOWER SEEDS,

comprising unusually fine varieties and of undoubted quality and vitality—being raised under the particular direction and expressly for the establishment.

Garden Seeds in boxes assorted for dealers from 10 to 100 dollars each. Also in pounds, halves and quarters, at very moderate prices.

Boxes of Seeds containing a good assortment for private gardens, at $3 each.

300 to 400 choice varieties of FLOWER SEEDS in 6 cent papers—20 papers for $1,00.

Grass Seeds, at the lowest market prices, Wholesale and Retail.

Fruit and Ornamental TREES, *Grape Vines, Plants and Roots*, supplied at one day's notice.

Just published, a Catalogue of 80 pages, which will be sent *gratis* to customers.

jan 31-eow12wis GEO. C. BARRETT.

Garden Seeds.

SEVERAL hundred pounds fresh Garden Seeds, of the greatest variety, lately received from William Prince & Sons, Flushing, Long Island, many of which were lately imported from different parts of Europe, for sale by the subscribers, wholesale and retail. A. & J. BOSTWICK.

Auburn, March 17, 1835. mar 19-3t

Superior Onion Seed.

THE subscriber offers for sale 1500 lbs. superior quality Red Onion Seed, American growth, crop of 1834, heavy fine seed—price 75 cents per pound by the 50 lbs. or more—cash. Also, 500 lbs. Yellow Onion seed—$1. 200 lbs. Large Silver White do.—$1,50. Received by late arrivals from England, France and Holland, a large collection of Early and Late Cabbage seeds; Cauliflower; Brocoli; Mangel Wurzel; White Dutch Clover; Lucerne; Trifolium incarnatum, &c. Also, the best collection of *warranted* Garden Seeds to be found in America. Those who purchase to sell again supplied on accommodating terms. Price currents furnished on application.

GEO. C. THORBURN, *Seedsman*,
March, 1835. 67 Liberty-st., N. York.

Just received from London, 1000 superb Dahlias, which can be sent in April—a separate catalogue of all the fine new varieties can be furnished—among them is the celebrated "*Queen of Dahlias*," which attracted so much attention at the exhibition in this city last autumn. It is pure white, with cupped petals beautifully edged with lilac—grows but four feet high, and flowers in profusion. It is beyond question the finest Dahlia ever raised in England. Plants of this choice variety will be ready for delivery in pots on the 1st of May, at $2 each. mar 14-3t

Rochester Seed Store & Horticultural Repository.

No. 5 *Arcade Hall, next door but one to the Post-Office.*

REYNOLDS & BATEHAM, having completed their assortment, now offer to the pubiic the best and most extensive collection of Garden, Field and Flower Seeds, ever before offered in the Western country.

Their stock is entirely new, and having been purchased directly of the growers and importers, the vitality and purity of the seeds are expressly guaranteed. Farmers and Gardeners will find a great variety of new and valuable Seeds not heretofore introduced into this section of country.

They have also an assortment of superior Horticultural Implements, Books, &c.

Merchants and others supplied with assortments of Seeds for retailing at a liberal discount.

All orders for Seeds, Fruit or Ornamental Trees, Shrubs, Grape Vines, Green-House Plants, &c. &c. by mail or otherwise, will meet with prompt attention.

Cash will at all times be paid for Grass and Clover Seed, Peas, Beans, &c. dec 9-r4tfif

Monroe Horticultural Garden & Nursery.

THE subscriber offers to the public a choice selection of Fruit Trees, of French, German, English and American varieties, consisting of Apples, Pears, Plums, Peaches, Cherries, Apricots, Nectarines, Quinces, Currants, Gooseberries, Raspberries, Strawberries, Ornamental Trees, Shrubs, Plants, Hardy Roses, Vines, Creepers, Herbaceous Perennial Plants, Bulbous Roots, &c. &c.

ALSO—A few hundred of the Morus Multicaulis, or Chinese Mulberry, the White Italian Mulberry by the hunbred or thousand, Grape Vines of both native and foreign varieties, mosty of large size, for sale by the single vine, hundred or thousand, at reduced prices. The subscriber has a large collection of Green-House Plants of choice and select varieties, and in good condition.

☞ Orders for *Mr.* Rowe's Nursery received by the Publisher of this paper.

Catalogues will be sent to those who wish them, gratis, or may be had by calling at the office of the Genesee Farmer. ASA ROWE.

Greece, *Monroe* co. N. Y. Sept. 13, 1834.

Clover Seed,

OF both the large and small varieties.—Also, a quantity of White Field Peas, (from Canada,) and large white Marrowfat Peas, of superior quality, just received and for sale at the Rochester Seed Store. REYNOLDS & BATEHAM.

Rochester, Jan. 31, 1835. jan 31

From the Horticultural Register.

The Cultivation of Asparagus.

Having had considerable experience in the cultivation of asparagus, and been so far successful as to raise it nearly two inches in diameter, or between five and six inches in circumference, some of which I exhibited at the Massachusetts Horticultural Society, in the spring of 1833, and which obtained the Society's premium for the largest and best asparagus: having, also, for several years past sold in Quincy market from seventeen to twenty-five cents the bunch, when the same sized bunches of the common kind were selling from six to ten cents, I am induced at this time to inform you and the public of my method of growing this delicious vegetable. I sow the seed in the same manner and time with blood beets in the spring, preparing the ground in the same way, as the young or seedling plants will thrive in soil that will grow good beets. I generally sow, and think it the best way, one row of beets, and another of asparagus alternately, one foot asunder, which brings the beet rows two feet apart, the proper distance for this vegetable.

As asparagus makes a very small growth the first season, it will not in the least interfere with the beet crop; on the other hand, I think it is rather an advantage to the growth of asparagus, as the large leaf of the former serves to protect the weak and slender shoot of the latter.

The nature of the plants likewise differs so materially, one having a long tap root calculated to draw deep from the soil, the other very small fibrous roots, which invariably, in this plant more than any I have observed, draw juices from the surface; in this case neither draws food from the other, as is apt to be the case when different vegetables of the same habits and wants grow near each other.

The second season after sowing it will be necessary for the asparagus to occupy the whole ground, the rows being two feet apart, a very proper distance; as the plants make a large growth the second year, they may stand in the seed rows within an inch of each other. By the above method I have raised from 2 to 5000 roots a year, which I have sold

In choosing and preparing the ground for putting down an asparagus bed, as it is called, I select a piece of ground that has been under tillage the year previous; a sandy loam if I have it; if not, I add sand, the washing of roads and other materials, to bring it as near the nature of the above named soil as possible. I then plough very deep, if the soil will admit, ten inches or more; cart on and spread about twenty cart loads of manure, or in that proportion to the acre. I prefer fresh or unfermented horse manure for this as well as for most other crops. After this, cross plough not quite so deep as before, and trench furrow by running a plough both ways in the same furrow, four feet apart; clear out the trenches with a shovel ten inches deep and one foot wide at the bottom, throwing the earth into ridges between the rows as even as possible; lastly, I draw in from the sides of the trenches a small quantity of fine earth, about one inch deep, leveling it with the hoe as it is drawn in, and the ground is prepared for planting It is very important that the roots should be taken up carefully, and exposed as little to the sun and air as possible previous to planting. My method is to start them from the seed bed and put them under cover or into the cellar as soon after digging as possible; then part the roots, which come up in bunches, snarled together; cut off the fingers, (so I name the roots,) that are broken and ragged, and pack them away in meadow moss until I am ready for planting, which is performed as follows: The roots are taken to the field in a basket, packed in moss, and lifted out as you plant, placing them in a straight line on the bottom of the trench, from twelve to fourteen inches apart, taking hold of the crown of the root and pressing it gently down, carefully spreading the roots or fingers horizontally in every direction, as the roots of asparagus naturally grow horizontal—and the fibers or feeders extend upwards to the surface; this I ascertained by examining a bed that had been hoed after cutting time, in June, immediately before a smart shower. The surface of the earth was literally covered with small white fibrous roots. As the bed was situated at the brow of a large hill, a part of it was gullied by the water in one or two places below the main roots, where I had a fine opportunity to examine both roots and fibers. There were few if any fibers two inches below the main roots, notwithstanding that the bed was put down according to the old method, deep trenching, and filling in six inches below the roots with good rotten manure, which I found safely deposited in rather a decomposed state, having laid several years without being disturbed either by roots, fibers, worms or weather. It is necessary for a man to follow immediately after the one that places the roots in the bottom of the trench, who has some skill in the use of the hoe; moving backwards, taking care to step each side of the roots in the trench, so as not to disturb them, and with his hoe scraping from each side of the trench regularly, so as to cover the crown of the roots about three inches; and the planting is completed A field or bed managed in this way has a handsome appearance the first season, if the ridges are kept neat and in a workmanlike manner. Between the rows of asparagus on the top of the ridges I usually grow a very fine crop of tap rooted plants, which does not in the least injure it the first summer.

After the asparagus shoots have made their appearance about six inches above ground, it is a good plan to draw a little earth around the stalks about an inch deep, so as to kill the weeds, which may be repeated in the course of the season without injuring the row of roots on the ridge. The second year after planting, as soon as the frost is out of the ground, spread along in the trenches, which will then be three or four inches deep, about one inch of light compost manure; then with a plough back furrow every row separately, turning the furrows directly over the asparagus, making two bouts to a row, rake or cross harrow, and the bed will be level, requiring no more care that season except keeping down the weeds. The third spring, as soon as the weather permits, burn the old stalks on the ground, spread at the rate of twenty cart loads per acre, of good compost or horse manure, and plough it in, taking care to turn narrow furrows, and not so deep as to injure the crown of the root; then rake or harrow, and the bed will be in readiness for gathering, or cutting, which should be done in the following manner: As soon as the shoots project five or six inches above the ground, and before the buds begin to open, cut them off with a knife about one inch or less below the surface of the ground; (not three or four as is recommended by some theorists,) as all that grows below the surface is stringy and tough and not fit to eat. The old stump immediately decays, and makes the best of food for the plants. I continue cutting, about two months from the time I begin in the spring, having no regard for the twenty-first day of June, or any other particular day, as the plant naturally produces a given quantity of shoots every season, without injury to the root.

The above method should be pursued yearly, as long as the bed lasts, which in this climate I presume will continue to produce well from thirty to forty years, under the above treatment The bed that produced the large shoots I spoke of, was put down in 1819; in 1833, the season I sold my farm, the produce was equal, if not superior, to any former year.

Yours, &c. D. Chandler.

Thompson Island, Feb. 9, 1835.

Fruit Trees

Might and ought to be planted by walls, hedges, on side-hills and by the side of high-ways and by-ways, in lands too stony to till, and should occupy the places of useless shrubs and forest trees of little value, such as white birch, soft maple, &c. Millions of such trees might adorn places which are now barren of all useful vegetation, mere blanks or deformities, which give neither pleasure to the eye of the traveler, nor profit to the owner of the soil It is remarked in "*Cobbett's Ride in France*," that "from Talmas to Saint Just," a distance of more than twenty leagues, apples and pears have been employed in this capacity, (to line the road side,) for the whole distance —*Ib.*

To Destroy the Grub at the Root

OF CAULIFLOWERS, CABBAGES, &c.

W Mathers, gardener to Lady Palmer near Leicester, England, states in Loudon's Magazine, in substance, that a small handful of soot, applied to the stems of cauliflowers and cabbages, in case of the grub at the root, earthing up the plants, was an effectual remedy against the depredations of the insects. Sea water, a weak solution of salt and water, lime water and soap suds, have also been recommended for the same purpose.—*Ib.*

New Plan of Sticking Peas.

Procure a number of slim poles, about five feet long, and drive them into the ground at the distance of three or four yards. Pass a small line along the poles, taking a turn on each, within three inches of the ground; raise the next turn three inches, and so on in succession, till you have attained the common height to which peas rise. The tendrils of the peas seize and twist round these lines, and they are supported in a more attractive and a more profitable manner than they are by the common stakes. When spread regularly along the lines, they have a fine circulation of air, more advantage from sunshine, and pods can be pulled at all times without injuring the plants, and as the sparrows have no twigs to light on, the portion of the crop which they destroy and devour is saved. This mode is so cheap and simple, and possesses so many advantages, that it is likely to be soon generally adopted.—*Scotsman.*

Winter Management of Bees.

A writer for Loudon's Magazine states that "In a severe winter bees are for the most part asleep, and do not eat much of their honey; in a mild winter they are in motion, and eating, and have not an opportunity of renovating their stores from flowers. Keeping these facts in view, the owner of the bees put them to rest in the month of October, by burying them in a peat stack; and did not restore them till the willows were in blossom in the following April. The success was most complete, and the practice worthy of imitation in other districts, by placing the hives in cold dark cellars, or in ice-houses.

A New Method of Obtaining

EARLY PEAS.

Mr. David Bishop in Loudon's Magazine makes the following remarks on this subject: "The method of rearing peas in pots and boxes, in hot-beds, and hot-houses, and afterwards transplanting them out in the open ground, is a common practice with gardeners, and often succeeds very well; particularly if they are not too long in transplanting them; but I would recommend a method not so well known, as far preferable to that of pots or boxes, particularly when they are to be raised in a hot bed. This consists in having a quantity of turf cut into pieces, of about nine or ten inches long, and three or four broad, which are placed in a regular manner over the surface of the bed, grass side downwards, and a row of peas is sown upon each row of turf, and afterwards covered with soil; when they are fit for transplanting, no more is required than to lift out the turf piece by piece with the peas growing upon it, and place them where they are to produce their crop By this measure the roots receive no injury; nor do the plants sustain the least check in transplanting. This method may be practiced with similar success in the raising of potatoes, beans, &c."

The more quiet and undisturbed geese are kept the faster and better they fatten.